

Receiving Report

Date: 13/7/19

Batch No: 1126390

Supplier: THYCO

Dart P/O: 20536

Packing Slip: Yes No
 Invoice: Yes No
 Receipt: Cash Cr

Release Note Attached: Yes No N/A
 Waybill Attached: Yes No
 Shipment Complete: Yes No N/A
 QC6 Inspection: OK 13/07/22 Yes No N/A
 Work Order N/A

Discrepancies

Part Number	Description	Quantity ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
<u>M707816310200150</u>		<u>120</u>	<u>0</u>	<u>0</u>	<u>12</u>	

Initials of receiver (if shipment OK) Level 12 L

Production/Admin:

Date

Received/Costing

Initial

13/7/19

Location:



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO20536**

Purchase Order Date 7/11/2013
PO Print Date 7/12/2013

Page Number 1 of 3

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL "A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 905 669 9444

Ship To Contact
Ship To Phone
Ship Via: Yours.ppd
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB Destination-Collect

REOISED

M126390

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	List Price	Disc %	Discounted Unit Price	Extended Price
1	M7075T6B0.375X3.000	7075-T6 BAR 0.375" X 3.000"	7/23/2013	Yes	12.00 f	12.00			\$165.00
		MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR PER AMS-QQ-A-A-200/11 OR CUT FROM PLATE QQ-A-250/12			7/23/2013				
2	M7075T6B0.375X8.000	7075-T6 BAR 0.375" X 8.000"	7/23/2013	Yes	24.00 f	24.00			\$490.00
		SAME AS ABOVE			7/23/2013				

Line Total: \$165.00

Line Total: \$490.00

Note:



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO20536**

Purchase Order Date 7/11/2013

PO Print Date 7/12/2013

Page Number 2 of 3

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL "A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD.

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905 669 9444

Buyer

Chantal Lavoie

Customer POID

10127-2607

Customer Tax #

Net 30

Terms

CAD

Currency

FOB

Destination-Collect

Ship To Contact

Ship To Phone

Ship Via: Yours ppd

Ship Acct:

3	M7075T6B1.500X1.500	7075 T6 BAR 1.500 x 1.500	7/23/2013	12.00	✓OK	\$235.00
	SAME AS ABOVE		Yes	f		

7/23/2013

12.00 ✓OK
f

4	M7075T6B1.500X8.500	7075-T6 BAR 1.500' X 8.500"	7/23/2013	12.00	12.00 ✓OK	\$849.52
	SAME AS ABOVE		Yes	f		

7/23/2013

Line Total: \$235.00

5	M7075T6B2.250X02.750	7075-T6 BAR 2.250' X 2.750"	7/23/2013	36.00	36.00 ✓OK	\$1,194.00
	SAME AS ABOVE		Yes	f		

7/23/2013

Line Total: \$849.52

6	M7075T6B2.250X02.750	7075-T6 BAR 2.250' X 2.750"	7/23/2013	36.00	36.00 ✓OK	\$1,194.00
	SAME AS ABOVE		Yes	f		

7/23/2013

Line Total: \$1,194.00

Note:

7/12/2013



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO20536**

Purchase Order Date 7/11/2013

PO Print Date 7/12/2013

Page Number 3 of 3

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL "A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 905 669 9444

Buyer Chantal Lavoie

Ship To Contact
Ship To Phone
Ship Via: Yours ppd
Ship Acct:

Customer POID 10127-2607

Customer Tax # Net 30

Terms CAD

Currency Destination-Collect

FOB

6 M7075T6B4.000X4.500 7075-T6 BAR 4.000' X 4.500" 7/23/2013 12.00 *12-04 04* \$1,155.00
SAME AS ABOVE 7/23/2013

Line Total: **\$1,155.00**

7 M7075T6B1.000X1.000 7075 T6 BAR 1.00 x1.00 7/23/2013 12.00 *✓* \$111.00
JK SAME AS ABOVE 7/23/2013

Line Total: **\$111.00**

8 M7075T6B5.000X0.375 7075-T6 BAR 5.000" X 0.375" 7/23/2013 36.00 *36.125* *7/3/13* \$465.00
JK SAME AS ABOVE 7/23/2013

Line Total: **\$465.00**

PO Total: **\$4,664.52**

Note: Pricing listed above is as per contract agreement between Dart Aerospace and the respective manufacturer.
No substitution or deviation without consent.

Certificate of Conformity or Material Certification required - YES NO

Change Nbr: 4

Change Date: 7/12/2013

KAISER
ALUMINUM
FABRICATED PRODUCTS

*Beth in
July*

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

Kaiser Aluminum
Trentwood Works
Spokane, WA 99215-5108
(800) 367-2586

CUSTOMER PO NUMBER:		WORK PACKAGE:	CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:			
5400106640-0060			ALFLR00984-60.5		Sawed Plate			
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:	ALLOY:	CLAD:	TEMPER:			
1120519	5	10/03/2011	7075	BARE	T651			
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	GAUGE:	WIDTH:	LENGTH:			
4758 LB	14 PCS EST.	2033942	0.3750 IN	60.500 IN	144.500 IN			
SHIP TO:	SOLD TO:							
COPPER & BRASS SALES 5450 EAST HOME FRESNO, CA 93727 US	COPPER & BRASS SALES ATTN: ACCOUNTS PAYABLE P.O. Box 5116 SOUTHFIELD, MI 48086 US							

MHU 1526136: LOT 559802A4: 14 pieces

Certified Specifications

AMS 4045/RevK AMS-QQ-A-250/12 ASTM B 209/Rev07

Test Code: 1512

Test Results:

Orl 3/07/20

LOT: 559802A4 CAST: 414 DROP: 28 INGOT: 4

Melted in USA
(ASTM E8/B557)
(EN 2002-1)

Tensile: Temper Dir/#Tests Ultimate KSI (MPA) Yield KSI (MPA) Elongation %
T651 LT / 02 (Min:Max) 83.7 : 83.9 72.8 : 72.8 13.5 : 14.7
(577 : 578) (502 : 502)

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.08	0.17	1.4	0.02	2.4	0.19	5.5	0.03	0.01	0.01	TOT 0.05

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
7075	MIN 0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	MAX 0.05
	MAX 0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT 0.15

Aluminum Remainder

Plant Serial: 4240789

Kaiser Order Number: 1120519

Line Item: 5

Page 1 of 2

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD Del.: 2402583660

CstAr

CstOr 250159

Wgt.: 17.000 LB

Date 07/13/2013

John J. Gambatti



CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

Kaiser Aluminum
Trentwood Works
Spokane, WA 99215-5108
(800) 367-2586

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC (Kaiser) hereby certifies that metal shipped under this order was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content. This material has been inspected, tested and found in conformance with the requirements of the applicable specifications as indicated herein. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. All metal which is solution heat treated complies with AMS 2772. Any warranty is limited to that shown on Kaiser's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of Kaiser Aluminum Fabricated Products, LLC laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law. ISO-9001:2000 certified.

MIKE KLOCKE, LABORATORIES SUPERVISOR

Plant Serial: 4240789

Kaiser Order Number: 1120519

Line Item: 5

Page 2 of 2

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD Del.: 2402583660

CstAr

CstOr 250159

Wgt.: 17.000 LB

Date 07/13/2013

COPPER AND BRASS SALES**MATERIAL TYPE****ALUMINIUM ALLOYS****PRODUCT DESIGNATION****2014 2024 2224 2324 7050 7075 7150 7175 7475 ALUMEC 89 ALUMEC 99 QC-7****"WARNING"**

SMALL CHIPS, FINE TURNINGS AND DUST MAY IGNITE READILY. EXPLOSION POTENTIAL MAY BE PRESENT WHEN: DUST OR FINES ARE DISPERSED IN THE AIR; FINE, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH CERTAIN METAL OXIDES; OR, CHIPS, FINES, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH WATER OR MOISTURE. KEEP AWAY FROM IGNITION SOURCE. USE EXPLOSION-PROOF VENTILATION. KEEP MATERIAL DRY.

THIS PRODUCT CONTAINS BERYLLIUM AND COPPER. INHALING BERYLLIUM DUST OR FUMES MAY CAUSE CHRONIC BERYLLIUM DISEASE (CBD), A SERIOUS CHRONIC LUNG DISEASE IN SOME INDIVIDUALS. BERYLLIUM IS A CANCER HAZARD; OVER TIME CBD AND CANCER CAN BE FATAL. TARGET ORGAN IS PRIMARILY THE LUNG. INHALING LARGE AMOUNTS OF COPPER, MAGNESIUM OXIDE, MANGANESE OXIDE, AND ZINC OXIDE FUMES OR DUST MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS. CHRONIC OVEREXPOSURE TO COPPER MAY CAUSE THICKENING OF THE SKIN; AND SKIN, TEETH, AND HAIR DISCOLORATION. CHRONIC OVEREXPOSURE TO MANGANESE DUST CAN CAUSE CENTRAL NERVOUS SYSTEM DAMAGE, SCARRING OF THE LUNGS AND REPRODUCTIVE HARM IN MALES. TARGET ORGAN IS PRIMARILY THE LUNG, BUT REPEATED HIGH EXPOSURE CAN ALSO AFFECT THE LIVER. CHRONIC OVEREXPOSURE TO IRON OXIDE DUST/FUME MAY CAUSE LUNG SIDEROSIS. CHRONIC OVEREXPOSURE TO SILICON DUST CAN CAUSE CHRONIC BRONCHITIS. OVEREXPOSURE TO AMORPHOUS SILICA CAN CAUSE DRYING OF THE MUCOUS MEMBRANES OF THE EYES, NOSE, AND THROAT.

THIS PRODUCT ALSO CONTAINS NICKEL AND CHROMIUM COMPOUNDS. INHALATION OF NICKEL DUST OR FUME MAY RESULT IN INFLAMMATION OF THE RESPIRATORY TRACT AND CAUSE NASAL AND/OR LUNG CANCER. NICKEL HAS BEEN IDENTIFIED AS A POTENTIAL HUMAN CARCINOGEN. EXPOSURE TO CHROMIUM DUST OR FUMES MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS AND KIDNEY AND LIVER DAMAGE. UNDER HIGH TEMPERATURES, HEXAVALENT CHROMIUM MAY BE PRODUCED, IF IN THE INSOLUBLE FORM, IT IS A CONFIRMED HUMAN CARCINOGEN. (CALIFORNIA PROPOSITION 65).

IF COATED WITH OIL, MAY CAUSE SKIN IRRITATION/DERMATITIS BY CONTACT. WELDING FUME IS LISTED AS A POSSIBLE CARCINOGENIC TO HUMANS.

READ THE ALUMINIUM/ALUMINIUM ALLOYS MATERIAL SAFETY DATA SHEET (MSDS) ON FILE WITH YOUR EMPLOYER BEFORE WORKING WITH THIS MATERIAL.

* If processing or recycling produces particulate, use exhaust ventilation or other controls designed to prevent exposure to workers. Examples of such activities include melting, welding, grinding, abrasive sawing, sanding and polishing. Any activity which abrades the surface of this material can generate airborne particulate. Use appropriate NIOSH approved respiratory protection (P95; P100 for lead with, quantitative fit testing required) if exposures exceed the permissible limits.

* The Occupational Safety and Health Administration (OSHA) have set mandatory limits on occupational exposures.

* Aluminum, in solid form and as contained in finished products presents no special health risk.

* Sold for manufacturing purposes only. This product can be recycled; contact your sales representative.

For additional information, call or write to Copper and Brass Sales, 22355 West Eleven Mile Road, Southfield, MI 48033, telephone 248-233-5600, or visit our web site @ www.copperandbrass.com.

*Beth in
Gum*

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

Kaiser Aluminum
 Trentwood Works
 Spokane, WA 99215-5108
 (800) 367-2586

CUSTOMER PO NUMBER:		WORK PACKAGE:	CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:	
5400106640-0060			ALFLR00984-60.5		Sawed Plate	
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:	ALLOY:	CLAD:	TEMPER:	
1120519	5	10/03/2011	7075	BARE	T651	
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	GAUGE:	WIDTH:	LENGTH:	
4758 LB	14 PCS EST.	2033942	0.3750 IN	60.500 IN	144.500 IN	
SHIP TO:	SOLD TO:					
COPPER & BRASS SALES 5450 EAST HOME FRESNO, CA 93727 US	COPPER & BRASS SALES ATTN: ACCOUNTS PAYABLE P.O. Box 5116 SOUTHFIELD, MI 48086 US					

MHU 1526136: LOT 559802A4: 14 pieces

Certified Specifications

AMS 4045/RevK AMS-QQ-A-250/12 ASTM B 209/Rev07

mh 13/07/22

Test Code: 1512

Test Results:

LOT: 559802A4 CAST: 414 DROP: 28 INGOT: 4

Melted in USA
 (ASTM E8/B557)
 (EN 2002-1)

Tensile: Temper Dir/#Tests Ultimate KSI (MPA) Yield KSI (MPA) Elongation %
 T651 LT / 02 (Min:Max) 83.7 : 83.9 72.8 : 72.8 13.5 : 14.7
 (577 : 578) (502 : 502)

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.08	0.17	1.4	0.02	2.4	0.19	5.5	0.03	0.01	0.01	TOT 0.05

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
7075	MIN 0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	MAX 0.05
	MAX 0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT 0.15
	Aluminum Remainder										

Plant Serial: 4240789

Kaiser Order Number: 1120519

Line Item: 5

Page 1 of 2

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD Del.: 2402583666

CstAr

CstOr 250159

Wgt.: 89.000 LB

Date 07/13/2013

John R. Zumbro

KAISER
ALUMINUM
FABRICATED PRODUCTS

*Beth in
Gum*

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

Kaiser Aluminum
Trentwood Works
Spokane, WA 99215-5108
(800) 367-2586

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC (Kaiser) hereby certifies that metal shipped under this order was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content. This material has been inspected, tested and found in conformance with the requirements of the applicable specifications as indicated herein. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. All metal which is solution heat treated complies with AMS 2772. Any warranty is limited to that shown on Kaiser's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of Kaiser Aluminum Fabricated Products, LLC laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law. ISO-9001:2000 certified.

MIKE KLOCKE, LABORATORIES SUPERVISOR

Plant Serial: 4240789

Kaiser Order Number: 1120519

Line Item: 5

Page 2 of 2

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD Del.: 2402583666

CstAr

CstOr 250159

Wgt.: 89.000 LB

Date 07/13/2013

John Gumbel

COPPER AND BRASS SALES**MATERIAL TYPE****ALUMINIUM ALLOYS****PRODUCT DESIGNATION****2014 2024 2224 2324 7050 7075 7150 7175 7475 ALUMEC 89 ALUMEC 99 QC-7****"WARNING"**

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READ THE ALUMINIUM/ALUMINIUM ALLOYS MATERIAL SAFETY DATA SHEET (MSDS) ON FILE WITH YOUR EMPLOYER BEFORE WORKING WITH THIS MATERIAL.

* If processing or recycling produces particulate, use exhaust ventilation or other controls designed to prevent exposure to workers. Examples of such activities include melting, welding, grinding, abrasive sawing, sanding and polishing. Any activity which abrades the surface of this material can generate airborne particulate. Use appropriate NIOSH approved respiratory protection (P95; P100 for lead with, quantitative fit testing required) if exposures exceed the permissible limits.

* The Occupational Safety and Health Administration (OSHA) have set mandatory limits on occupational exposures.

* Aluminum, in solid form and as contained in finished products presents no special health risk.

* Sold for manufacturing purposes only. This product can be recycled; contact your sales representative.

For additional information, call or write to Copper and Brass Sales, 22355 West Eleven Mile Road, Southfield, MI 48033, telephone 248-233-5600, or visit our web site @ www.copperandbrass.com.



4

CERTIFIED TEST REPORT
Constellium Rolled Products Ravenswood, LLC

COPPER & BRASS SALES
1015 SAINT JEROME STREET
MISHAWAKA IN
46544

COPPER & BRASS SALES
P.O. BOX 5116
SOUTHFIELD MI
48086

COPPER&BR P28302 4075 INCLUSION SERIAL#: 20130527P28302 PAGE 1 OF 3

CUSTOMER PURCHASE ORDER NO. & ITEM				Constellium ORDER NO.		CERTIFICATION				
5400179097				110-513091		"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."				
ALLOY	CLAD.	TEMPER	GAUGE	WIDTH	LENGTH	Constellium Rolled Products Ravenswood, LLC Rt 2 South, Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA				
7075	00	T651	1.53000	60.500	144.500	<i>Rodney J. Feltz</i> Rodney J. Feltz - Laboratory Manager				
ITEM ORDERED										
MOLD PLATE-DIST GE SPEC PLATE, SAWED MILL										
13/07/20										
CUSTOMER SPECIFICATION										
AMS-QQ-A-250/12										
PART NUMBER	B/L NUMBER		DATE SHIPPED							
ALFLR00998	P28300		05/28/13							
WEIGHT SHIPPED	NO. OF PIECES	GOVT. CONTRACT NO.								
8,520	6									

LOT NUMBER	TEST DIRECTION	NO. OF TESTS	ULTIMATE STRENGTH K.S.I.		YIELD STRENGTH K.S.I.		ELONGATION %		COND % TACS										
			MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN	MAX									
388201	LT	2	***** T651	80.3	81.1	70.4	70.9	13.5	13.5										
All material contained in lot 388201 was cast and manufactured in the USA.																			
401811	LT	2	80.7	80.9	70.4	70.4	13.0	13.5											
All material contained in lot 401811 was cast and manufactured in the USA.																			
ALL LOTS ON THIS CERTIFICATION ALSO CONFORM TO THE FOLLOWING REQUIREMENTS																			
AMS 4045K AND ASTM B209-10																			
C H E M C O M P	ALLOY	SILICON		IRON		COPPER		MANGANESE		MAGNESIUM		CHROMIUM		ZINC		TITANIUM		OTHERS	
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	EACH TOTAL MAX.	
SEE ACTUAL CHEMICAL COMPOSITION																			
ALUMINUM REMAINDER																			

P-860-155D (06/11)

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD Del.: 2402583664

CstAr

CstOr 250159

Wgt.: 197.000 LB

Date 07/13/2013



CERTIFIED TEST REPORT

Constellium Rolled Products Ravenswood, LLC

COPPER & BRASS SALES
1015 SAINT JEROME STREET
MISHAWAKA IN
46544

COPPER & BRASS SALES
P.O. BOX 5116
SOUTHFIELD MI
48086

COPPER&BR P28302 4075 INCLUSION SERIAL#: 20130527P28302 PAGE 2 OF 3

CUSTOMER PURCHASE ORDER NO. & ITEM 5400179097				Constellium ORDER NO. 110-513091		CERTIFICATION								
ALLOY 7075	CLAD. 00	TEMPER T651	GAUGE 1.53000	WIDTH 60.500	LENGTH 144.500	"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."								
ITEM ORDERED MOLD PLATE-DIST GE SPEC PLATE, SAWED MILL														
13/07/20														
CUSTOMER SPECIFICATION AMS-QQ-A-250/12														
PART NUMBER ALFLR00998	B/L NUMBER P28300		DATE SHIPPED 05/28/13		Constellium Rolled Products Ravenswood, LLC Rt 2 South, Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA									
WEIGHT SHIPPED 8,520	NO. OF PIECES 6	GOVT. CONTRACT NO.												
Rodney J. Feltz - Laboratory Manager														

LOT NUMBER	TEST DIRECTION	NO. OF TESTS	ULTIMATE STRENGTH K.S.I.			YIELD STRENGTH K.S.I.			ELONGATION %			COND. % TACS		
			MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MIN.	MAX.	
ACTUAL CHEMICAL COMPOSITION														
388201	C	SI= 0.06 CR= 0.21	FE= 0.12 ZN= 5.56	CU= 1.43 TI= 0.03	MN= 0.03 ZR= 0.01	MG= 2.51								
401811	C	SI= 0.05 CR= 0.21	FE= 0.11 ZN= 5.57	CU= 1.45 TI= 0.03	MN= 0.02 ZR= 0.01	MG= 2.54								
		OTHERS-EACH: .05	MAX.	OTHERS TOTAL: .15	MAX.	AL	REMAINDER							
		OTHERS-EACH: .05	MAX.	OTHERS TOTAL: .15	MAX.	AL	REMAINDER							
CHEMICAL COMPOSITION														
CHEM COM P.	ALLOY	SILICON		IRON		COPPER		MANGANESE		MAGNESIUM		CHROMIUM		
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	
SEE ACTUAL CHEMICAL COMPOSITION														
ALUMINUM REMAINDER														

P-860-155D (06/11)

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD Del.: 2402583664

CstAr

CstOr 250159

Wgt.: 197.000 LB

Date 07/13/2013

Constellium



CERTIFIED TEST REPORT

Constellium Rolled Products Ravenswood, LLC

COPPER & BRASS SALES
1015 SAINT JEROME STREET
MISHAWAKA IN

46544

COPPER & BRASS SALES
P.O. BOX 5116
SOUTHFIELD MI

48086

COPPER&BR P28302 4075 INCLUSION SERIAL#: 20130527P28302 PAGE 3 OF 3

CUSTOMER PURCHASE ORDER NO. & ITEM 5400179097				Constellium ORDER NO. 110-513091		CERTIFICATION	
ALLOY 7075	CLAD. 00	TEMPER T651	GAUGE 1.53000	WIDTH 60.500	LENGTH 144.500	<p>"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."</p> <p>Constellium Rolled Products Ravenswood, LLC Rt 2 South, Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA</p> <p><i>Rodney J. Feltz</i> Rodney J. Feltz - Laboratory Manager</p>	
ITEM ORDERED MOLD PLATE-DIST GE SPEC PLATE, SAWED MILL						13/07/20	
CUSTOMER SPECIFICATION AMS-QQ-A-250/12							
PART NUMBER ALFLR00998		B/L NUMBER P28300		DATE SHIPPED 05/28/13			
WEIGHT SHIPPED 8,520		NO. OF PIECES 6		GOVT. CONTRACT NO.			

LOT NUMBER	TEST DIRECTION	NO. OF TESTS	ULTIMATE STRENGTH K.S.I.		YIELD STRENGTH K.S.I.		ELONGATION %		COND % IACS			
			MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.		
THIS TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY OR AUTHORIZED QUALITY DELEGATE.												
THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW.												
CHEMISTRY BY OES: ARKSPARK												
CHEMISTRIES REPORTED IN PERCENTAGE BY WEIGHT.												
WHEN FRACTURE TOUGHNESS TEST REQUIRED, TESTED PER ASTM E899.												
WHEN TENSILE TEST REQUIRED, TESTED PER ASTM E8; B557.												
Mark Paperwork: ALFLR00998												
DUNS Number: 090570149; CAGE Code: 1YWL9												
Mercury is not a normal contaminant in aluminum alloys and neither mercury nor any of its compounds were utilized in the manufacture of our product.												
"END OF CERTIFICATION"												

C H E M C O M P	ALLOY	SILICON		IRON		COPPER		MANGANESE		MAGNESIUM		CHROMIUM		ZINC		TITANIUM		OTHERS	
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
		SEE ACTUAL CHEMICAL COMPOSITION																	
		ALUMINUM REMAINDER																	

P-860-155D (06/11)

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD Del.: 2402583664

CstAr

CstOr 250159

Wgt.: 197.000 LB

Date 07/13/2013

COPPER AND BRASS SALES**MATERIAL TYPE****ALUMINIUM ALLOYS****PRODUCT DESIGNATION****2014 2024 2224 2324 7050 7075 7150 7175 7475 ALUMEC 89 ALUMEC 99 QC-7****"WARNING"**

SMALL CHIPS, FINE TURNINGS AND DUST MAY IGNITE READILY. EXPLOSION POTENTIAL MAY BE PRESENT WHEN DUST OR FINES ARE DISPERSED IN THE AIR; FINE, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH CERTAIN METAL OXIDES; OR, CHIPS, FINES, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH WATER OR MOISTURE. KEEP AWAY FROM IGNITION SOURCE. USE EXPLOSION-PROOF VENTILATION. KEEP MATERIAL DRY.

THIS PRODUCT CONTAINS BERYLLIUM AND COPPER. INHALING BERYLLIUM DUST OR FUMES MAY CAUSE CHRONIC BERYLLIUM DISEASE (CBD), A SERIOUS CHRONIC LUNG DISEASE IN SOME INDIVIDUALS. BERYLLIUM IS A CANCER HAZARD; OVER TIME CBD AND CANCER CAN BE FATAL. TARGET ORGAN IS PRIMARILY THE LUNG. INHALING LARGE AMOUNTS OF COPPER, MAGNESIUM OXIDE, MANGANESE OXIDE, AND ZINC OXIDE FUMES OR DUST MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS. CHRONIC OVEREXPOSURE TO COPPER MAY CAUSE THICKENING OF THE SKIN; AND SKIN, TEETH, AND HAIR DISCOLORATION. CHRONIC OVEREXPOSURE TO MANGANESE DUST CAN CAUSE CENTRAL NERVOUS SYSTEM DAMAGE, SCARRING OF THE LUNGS AND REPRODUCTIVE HARM IN MALES. TARGET ORGAN IS PRIMARILY THE LUNG, BUT REPEATED HIGH EXPOSURE CAN ALSO AFFECT THE LIVER. CHRONIC OVEREXPOSURE TO IRON OXIDE DUST/FUME MAY CAUSE LUNG SIDEROSIS. CHRONIC OVEREXPOSURE TO SILICON DUST CAN CAUSE CHRONIC BRONCHITIS. OVEREXPOSURE TO AMORPHOUS SILICA CAN CAUSE DRYING OF THE MUCOUS MEMBRANES OF THE EYES, NOSE, AND THROAT.

THIS PRODUCT ALSO CONTAINS NICKEL AND CHROMIUM COMPOUNDS. INHALATION OF NICKEL DUST OR FUME MAY RESULT IN INFLAMMATION OF THE RESPIRATORY TRACT AND CAUSE NASAL AND/OR LUNG CANCER. NICKEL HAS BEEN IDENTIFIED AS A POTENTIAL HUMAN CARCINOGEN. EXPOSURE TO CHROMIUM DUST OR FUMES MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS AND KIDNEY AND LIVER DAMAGE. UNDER HIGH TEMPERATURES, HEXAVALENT CHROMIUM MAY BE PRODUCED, IF IN THE INSOLUBLE FORM, IT IS A CONFIRMED HUMAN CARCINOGEN. (CALIFORNIA PROPOSITION 65).

IF COATED WITH OIL, MAY CAUSE SKIN IRRITATION/DERMATITIS BY CONTACT. WELDING FUME IS LISTED AS A POSSIBLE CARCINOGENIC TO HUMANS.

READ THE ALUMINIUM/ALUMINIUM ALLOYS MATERIAL SAFETY DATA SHEET (MSDS) ON FILE WITH YOUR EMPLOYER BEFORE WORKING WITH THIS MATERIAL.

* If processing or recycling produces particulate, use exhaust ventilation or other controls designed to prevent exposure to workers. Examples of such activities include melting, welding, grinding, abrasive sawing, sanding and polishing. Any activity which abrades the surface of this material can generate airborne particulate. Use appropriate NIOSH approved respiratory protection (P95; P100 for lead with, quantitative fit testing required) if exposures exceed the permissible limits.

* The Occupational Safety and Health Administration (OSHA) have set mandatory limits on occupational exposures.

* Aluminum, in solid form and as contained in finished products presents no special health risk.

* Sold for manufacturing purposes only. This product can be recycled; contact your sales representative.

For additional information, call or write to Copper and Brass Sales, 22355 West Eleven Mile Road, Southfield, MI 48033, telephone 248-233-5600, or visit our web site @ www.copperandbrass.com.


Constellium

CERTIFIED TEST REPORT
Constellium Rolled Products Ravenswood, LLC
6
COPPER & BRASS SALES
1015 SAINT JEROME STREET
MISHAWAKA IN
46544
COPPER & BRASS SALES
P.O. BOX 5116
SOUTHFIELD MI
48086
COPPER&BR P12604 4075 INCLUSION SERIAL#: 20130522P12604 PAGE 1 OF 3

CUSTOMER PURCHASE ORDER NO. & ITEM				Constellium ORDER NO.		CERTIFICATION								
P12604 4075				110-513097		"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."								
ALLOY	CLAD.	TEMPER	GAUGE	WIDTH	LENGTH	<i>13/07/20</i>								
7075	00	T651	4.00000	60.500	144.500	<i>13/07/20</i>								
ITEM ORDERED	MOLD PLATE-DIST GE SPEC PLATE, SAWED MILL					<i>13/07/20</i>								
CUSTOMER SPECIFICATION														
AMS-QQ-A-250/12														
PART NUMBER	B/L NUMBER		DATE SHIPPED		<i>RAVENSWOOD, WV 26164 USA</i>									
ALFLR00369	P12600		05/24/13		<i>Rodney J. Felt</i>									
WEIGHT SHIPPED	NO. OF PIECES	GOVT. CONTRACT NO.												
11,100	3													

LOT NUMBER	TEST DIRECTION	NO. OF TESTS	ULTIMATE STRENGTH K.S.I.		YIELD STRENGTH K.S.I.		ELONGATION %		COND %		IACS	
			MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
401831	LT	2	*****	T651	79.7	80.6	68.3	69.8	*****	12.5	12.5	
All material contained in lot 401831 was cast and manufactured in the USA.												
ALL LOTS ON THIS CERTIFICATION ALSO CONFORM TO THE FOLLOWING REQUIREMENTS												
ASTM B209-10, AMS 4045K												

CH	ALLOY	SILICON		IRON		COPPER		MANGANESE		MAGNESIUM		CHROMIUM		ZINC		TITANIUM		OTHERS	
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
CU	SEE ACTUAL CHEMICAL COMPOSITION																		

ALUMINUM REMAINDER

P-860-156D (06/11)

From: ThyssenKrupp
Cust. THYSSENKRUPP MATERIALS NA - ECAD
Cst:AR
Wgt.: 276.000 LB

Date 07/15/2013



Constellium



CERTIFIED TEST REPORT

Constellium Rolled Products Ravenswood, LLC

COPPER & BRASS SALES
1015 SAINT JEROME STREET
MISHAWAKA IN

46544

COPPER & BRASS SALES
P.O. BOX 5116
SOUTHFIELD MI

48086

COPPER&BR P12604 4075				INCLUSION	SERIAL#:	20130522P12604 PAGE 2 OF 3	
CUSTOMER PURCHASE ORDER NO. & ITEM P12604 4075				Constellium ORDER NO. 110-513097			
ALLOY IS 7075	CLAD: 00	TEMPER T651	GAUGE 4.00000	WIDTH. 60.500	LENGTH 144.500		
ITEM ORDERED MOLD PLATE-DIST GE SPEC PLATE, SAWED MILL				13/07/20			
CUSTOMER SPECIFICATION AMS-QQ-A-250/12							
PART NUMBER ALFLR00369		B/L NUMBER P12600		DATE SHIPPED 05/24/13			
WEIGHT SHIPPED 11,100	NO. OF PIECES 3	GOVT. CONTRACT NO.					

CERTIFICATION

"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."

Rodney J. Felt
Rodney J. Felt - Laboratory Manager

Constellium Rolled Products Ravenswood, LLC
Rt 2 South, Century Road
P.O. BOX 68
RAVENSWOOD, WV 26164 USA

ACTUAL CHEMICAL COMPOSITION

LOT NUMBER	TEST DIRECTION	NO. OF TESTS	ULTIMATE STRENGTH K.S.I.		YIELD STRENGTH K.S.I.		ELONGATION %		COND %		IACS		
			MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	
401831	C SI = 0.06 CR = 0.18 OTHERS-EACH: .05		FE = 0.13 ZN = 5.41 MAX. OTHERS TOTAL: .15	CU = 1.45 TI = 0.03 MAX. OTHERS TOTAL: .15	MN = 0.05 ZR = 0.01 MAX. AL REMAINDER	MG = 2.50							
ACTUAL CHEMICAL COMPOSITION													
OILS CO2A	ALLOY	SILICON		IRON		COPPER		MANGANESE		MAGNESIUM		CHROMIUM	
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
SEE ACTUAL CHEMICAL COMPOSITION													
ALUMINUM REMAINDER													

John J. Mancuso

Constellium



CERTIFIED TEST REPORT

Constellium Rolled Products Ravenswood, LLC

COPPER & BRASS SALES
1015 SAINT JEROME STREET
MISHAWAKA IN

46544

COPPER & BRASS SALES
P.O. BOX 5116
SOUTHFIELD MI

48086

COPPER&BR P12604 4075				INCLUSION SERIAL#: 20130522P12604 PAGE 3 OF 3						
CUSTOMER PURCHASE ORDER NO. & ITEM				Constellium ORDER NO.						
5400179097				110-513097						
ALLOY	CLAD.	TEMPER	GAUGE	WIDTH	LENGTH					
7075	00	T651	4.00000	60.500	144.500					
ITEM ORDERED				1310720						
MOLD PLATE-DIST GE SPEC PLATE, SAWED MILL										
CUSTOMER SPECIFICATION										
AMS-QQ-A-250/12										
PART NUMBER	B/L NUMBER		DATE SHIPPED							
ALFLR00369	P12600		05/24/13							
WEIGHT SHIPPED	NO. OF PIECES	GOVT. CONTRACT NO.								
11,100	3									

CERTIFICATION

"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."

Constellium Rolled Products Ravenswood, LLC
Rt 2 South, Century Road
P.O. BOX 68
RAVENSWOOD, WV 26164 USA

Rodney J. Feltz
Rodney J. Feltz - Laboratory Manager

LOT NUMBER	TEST DIRECTION	NO. OF TESTS	ULTIMATE STRENGTH K.S.I.		YIELD STRENGTH K.S.I.		ELONGATION %		COND %	IACS MIN	IACS MAX					
			MIN.	MAX.	MIN.	MAX.	MIN.	MAX.								
THIS TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY OR AUTHORIZED QUALITY DELEGATE. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW.																
CHEMISTRY BY OES: ARKSPARK																
CHEMISTRIES REPORTED IN PERCENTAGE BY WEIGHT.																
WHEN FRACTURE TOUGHNESS TEST REQUIRED, TESTED PER ASTM E399.																
WHEN TENSILE TEST REQUIRED, TESTED PER ASTM E8; B557.																
Mark Paperwork: ALFLR00369																
DUNS Number: 090570149; CAGE Code: 1YWL9																
Mercury is not a normal contaminant in aluminum alloys and neither mercury nor any of its compounds were utilized in the manufacture of our product.																
"END OF CERTIFICATION"																

ALLOY	SILICON		IRON		COPPER		MANGANESE		MAGNESIUM		CHROMIUM		ZINC		TITANIUM		OTHERS	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	EACH TOTAL	MAX.
CHM COMP	SEE ACTUAL CHEMICAL COMPOSITION																	

ALUMINUM REMAINDER

P-860-155D (06/11)

From: ThyssenKrupp
Cust. THYSSENKRUPP MATERIALS NA - ECAD
CstDR 276.000 LB

CstDR

Date 07/15/2013
CstDR 250159
Del. : 2402583663

John J. Mankoski